Immersive and unmissable virtual reality revolution

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Abstract: With the beginning of the third technological revolution, we entered the Internet era, to twenty-first Century, science and technology and the rapid development of the network, it will inevitably lead to the revolution of science and technology network revolution to the driving force. The reconstruction of space, virtual and reality blend is the theme of this paper, the virtual reality platform is what kind of virtual reality? What is the impact on human life in the future? Information is unlimited, the reality of human cognition is limited, we through virtual reality data began to study the relationship between human beings and the data, the unique characteristics of the media, no boundaries, exclusivity, immersion, will start to change the status quo of human perception of reality. In this article, through virtual reality this trend, the virtual reality (VR) thought achievements as well as the essence, characteristics and application background of the development of, fully highlighted the experience of virtual reality and virtual reality caused by the perceptual revolution, also represents some of the industry development.

1. Introduction

What is our world? How do we know and interact with it is the direction that mankind has been trying to explore, and thus has produced philosophy, religion, and even science in the process of social evolution, and has produced reality and virtuality. The results of the long-term thinking of virtual reality are described by the structure of "discovering problems - analyzing problems - solving problems". A pair of relative concepts. From the perspective of human cognition to the development of virtual reality technology to the current development of virtual reality and the application industry, to the scope of promotion and use of virtual reality in human life, the current era issues are described. Because the virtual reality platform marked by borderlessness, exclusivity and immersion is attracting attention from the industry at an alarming rate, it is the next generation revolutionary computing platform. At present, virtual reality technology is still in the stage of exploration and improvement of technology application programs. Emerging technologies also call for a new industry ecology.

2. Human cognition and virtual reality

2.1 Human perception of reality: history; current situation; future

The computing platform is where humans relate to data. As a next-generation computing platform, virtual reality, because of its unique media characteristics—borderless, exclusive, and immersive—will change human perceptions of the world in an unprecedented way. No one has now refuted the enormous impact of the Internet on human society, because any sophistry is useless when fait accompli is in front of us. Historically, people continue to learn cognition, and they are full of huge doubts and thoughts about reality. The ancestors only have things that are summed up in continuous learning and practice. Most of them are subjectively considered, and they must pass when they know the world. In what way, these are the things to think about, whether to understand the reality, or to satisfy the image of the reality, so that they do not have a deep understanding. The perception of reality itself is constantly evolving, and the virtual desire to be immersive increases.
Some literary works and works of art are more in response to the reality of that era, and also reflect
the virtual madness in the depths of human nature.

2.2 Virtual and realistic boundaries

A huge advantage of virtual reality technology is the combination of eyes, ears and body. Due to
the emergence of the mobile Internet, our perception began to rely on touch and began to be
constrained by the impact of fingers on touch. We completed the touch screen interaction when we
touched, and completed the imagination through touch, vision and hearing. We appreciate the
“virtual” and clearly recognize the boundary between them and reality. In virtual reality space, the
boundaries between true and false in the future will become more and more blurred, and people will
complete their dreams in virtual space. Here, pay attention to the essence of human cognition. When
feeling virtual reality, the neural signals of organ feedback form the reality that the mind thinks.

3. Open a new depth of immersion

3.1 Immersive level

Immersion is hierarchical, and immersion must be experienced.

The first level is immersed in the information that can be noticed. “Immersiveness of information”
is the initial stage of immersion, and this is just the immersion of information and its collection. For
example, when we chatted with WeChat, someone chatted with you, often ignored him, or when we
were playing games, when someone sent a message, they would ignore him. Then we are immersed
in the information we face. Among them, the game is the nature of people's needs.

The second level is the immersion of sensory organs. When we see and hear, our body and eyes
feel it all at the same time.

The third level is the brain's immersion. It means that our brain is completely immersed in a
certain world. Every whole body up and down the senses, every cell. At present, it still stays in the
science fiction stage. The future brain immersion may be transmitted through the neural network
computer. As the future of science becomes more and more developed, human beings will definitely
enter the stage of brain immersion. The understanding of all information in the human brain is also
phased.

3.2 Human attention

Human attention is limited and information is infinite. In this reality, we can clearly see that
attention is already a scarce resource in this era. Human attention has a special scarcity. The essence
of attention is time. Because people's methods of allocating time are not rational, our time is never
enough in the face of too much information and data, how to choose the information and data that
should be concerned and allocate time for it. Attention will be the most compelling strategic
resource in the visible future history. In the past three decades, the scientific and technological
achievements of mankind have far exceeded the sum of thousands of years. The total amount of
information produced by humans is far more than the sum of thousands of years.

3.2.1 Scarcity of attention

Modern people have all the advantages that humans have never had before to collect, organize
and generate information. In the age of the Internet, humanity faced the problem that it had never
faced before—that is, the problem of rapid overload of information. We have been able to freely
access information, which has made human intelligence efficiency and social division of labor
unprecedentedly improved, and actually achieved such an effect, but too much information actually
puts everyone into a new era of anxiety. There are two dimensions of attention. The first is the
concentration of attention. It is the depth of concentration, concentration, or immersion. In our day,
the effective time is actually very small, and the time left for the real one may be only one or two
hours. In this case, we can use virtual reality within one hour to let humans focus on the machine.
The attention experience goes beyond the experience of ten hours during the day. The essence of
virtual reality is to increase the efficiency of human attention and to provide a new world for human beings when the total time is constant. In the era of scarce attention, we can open up a new depth of immersion through virtual reality, and can reorganize the fragmented attention and provide the best embodiment to achieve real reality.

4. Practical application of virtual reality

For the moment, virtual reality games are the most accessible virtual reality experiences, and people achieve virtual reality with a light interactive experience. In fact, virtual reality games will be a new kind of interactive entertainment experience. From the essence of gameplay, large-scale complex interaction, detailed social system comprehensive achievement system, complicated skill setting, excellent numerical balance and other factors. The delay of 3D vertigo and virtual reality hardware causes time synchronization. When the person rotates the angle of view or moves, the speed of the screen cannot keep up. In the full-view screen such as virtual reality, such delay is the biggest problem causing dizziness. At present, reducing the delay is the main means to reduce the vertigo of virtual reality.

5. Summary

The advancement of science and technology and the continuous innovation of the media have made people's time more and more fragmented. It is more and more difficult for people to feel immersive in one thing, and they are fully devoted to it. A single person, while we are wrapped in all the information, has lost the ability to think deeply. Faced with virtual reality as a computing platform, the operation mode has become more intuitive gestures and actions than keyboards, mice, and touch screens. At the same time, we are no longer limited by the physical size of traditional displays, so ease of use and immersion. It can free us from the interference of the outside world and concentrate on the virtual reality world, thus greatly improving the efficiency of attention. The current virtual reality experience is far from perfect, the hardware weight and interaction problems, the dizziness phenomenon is not solved, the operation mode is not intuitive, and the picture and interaction are not in line with human habits and intuition. Such a virtual reality experience is far from the feeling of letting people enter in an instant, and it is far from being a science fiction experience. Although the current virtual reality experience has given users the feeling of "coming in", this is not enough. We must have a clear understanding that virtual reality has created a new way of presenting display. Virtual reality directly acts on our eyes and presents the virtual world in front of us.

References